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UNDER THE PATENT COOPERATION TREATY--CHAPTER II

5   APPLICANT(S):   GUSTAVO DECO ET AL.

ATTORNEY DOCKET NO.:   P00,0861

INTERNATIONAL APPLICATION NO: PCT/DE98/03229

INTERNATIONAL FILING DATE: 05 NOVEMBER 1998

INVENTION: ARRANGEMENT FOR PREDICTING AN
                  ABNORMALITY OF A SYSTEM AND FOR
                  IMPLEMENTING AN ACTION OPPOSING THE
                  ABNORMALITY

10   Assistant Commissioner for Patents,
Washington D.C. 20231

INFORMATION DISCLOSURE STATEMENT
According to 37 C.F.R. §1.97(b)

Sir:

15   In accordance with the provisions of 37 C.F.R. §1.56 and the requirements of 37 C.F.R. §1.98, Applicant respectfully requests that a citation and examination of the references identified on the attached PTO 1449 form be made during the course of examination of the above-identified application for United States Patent.

20   The present Information Disclosure Statement is being filed according to 37 C.F.R. §1.97(b) and before the latter occurrence of:

         (1)   three months from the filing date of a national application;

         (2)   three months from the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application;

25   or

         (3)   the mailing date of a first Office Action on the merits.

REMARKS

The attached PTO 1449 form lists prior art references identified in the International Search Report, copy of which is enclosed herewith.

AA United States Patent 5,251,626

5 AB United States Patent 4,889,526

AE German reference DE 43 37 110

AF International application WO 96/36860

AG German reference DE 196 04 803

AH International application WO 95/10075

10 AI German reference DE 195 31 967

Articles:

AM D. Hoyer et al., "GRUNDLAGEN UND ERFAHRUNGEN ZUR MODELLIERUNG CHAOTISCHER ATTRAKTOREN DER

15 HERZFREQUENZFLUKTUATIONEN MIT KUENSTLICHEN NEURONALEN NETZEN" Vol. 40, July (1995), pp. 190-194, XP-002097627

AN L. Machado et al., "SEQUENTIAL VERSUS STANDARD NEURAL NETWORKS FOR PATTERN RECOGNITION:

20 AN EXAMPLE USING THE DOMAIN OF CORONARY HEART DISEASE", Computers in biology & medicine; Vol. 27, No. 4, July (1997), pp. 267-281, XP002097626

AO G. Deco et al., "Determining the Information Flow of Dynamical Systems from Continuous Probability

25 Distributions", The American Physical Society, Physical Review Letters, Vol. 78, No. 12, March (1997), pp. 2345-2348

AP C. Schittenkopf et al., "Testing nonlinear Markovian hypotheses in dynamical systems, Physica D104, (1997),

30 pp. 61-74

AQ   J. Herz et al., "Introduction to the Theory of Neural Computation", Lecture Notes Vol. 1, (1991), pp. 197-250

AR   G. Deco et al., "An Information Theoretic Approach to Neural Computing", Chapter 7, (1996), pp. 170-186

AS   B. Gluckman, et al., "Electric Field Suppression of Epileptiform Activity in hippocampal Slices, Rapid Publication, Journal of Neurophysiology 76, (1996), pp. 4202-4205

Explanation of Relevance

References AA, AB, AE-AF, and AM were all identified in the International Search Report. References AO-AS were discussed in the specification. Reference AE is a German Patent discussing an operating system that uses a neural network to analyze an electrocardiograph to determine heart rhythm disturbances. Reference AG is a German Patent discussing a system condition monitor that uses chaos theory. Reference AI is a German Patent discussing a training method for a neural network. Reference AN discusses the use of neural networks for pattern recognition for heart disease.

English abstracts for German Patents AE, AG, and AI have been provided. Full translations will be provided to the Examiner upon request.

The filing of the present Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed as an admission that the information cited in the present Information Disclosure Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

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The above citation of prior art is not a representation that such art constitutes a complete or exhaustive listing of all pertinent prior art, nor that it necessarily includes the closest or most relevant art. The aforementioned citation comprises a voluntary citation of prior art of which applicant and his attorney are

5   presently aware and is not intended to serve as a substitute for the Examiner's own search.

Submitted by,

_____ (Reg. No. 28,982)

Steven H. Noll

10   Hill & Simpson
A Professional Corporation
85th Floor - Sears Tower
Chicago, Illinois 60606
(312) 876-0200

15   Attorney for Applicant(s)